



# 21555 Non-Transparent PCI-to-PCI Bridge MKSROM

Application Note

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*November 2002*

Order Number: [278655-001](#)



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## Revision History

Date	Revision	Description
November 2002	001	First release of this document.



## 1.0 MKSROM Program

The Intel® 21555 PCI-to-PCI Bridge device allows for initial register and state values to be loaded upon device reset. This provides a mechanism for the device to change some internal default values without any modifications to the device itself. The *Mksrom.exe* file runs under MSDOS and requires the *dos4gw.exe* 32-bit DOS extender (provided on the Intel® website).

The MKSROM program allows the Serial ROM connected to the 21555 device to be updated with new SROM values. MKSROM will read in a pre-constructed file (see [Example 1 SROM.DAT](#) example file) and write those values into the SROM.

## 2.0 Usage

The *mksrom.exe* file reads in a file (*filename.ext*) as a parameter and parses the file to determine what values to program into each location of the SROM. If no parameter is used, the program searches for the first 21555 device and displays its contents on the screen.

***Mksrom [filename.ext]***

## 3.0 SROM File Syntax

The SROM file that is loaded requires specific configuration syntax. [Table 1](#) shows the required syntax.

**Table 1. SROM File Syntax**

Symbol	Description
;	Comment
[	Start of ROM data
]	End of ROM data
:	Start of valid address data line

The following example programs SROM addresses 0, 1, 2, and 0x1A with data 0x80, 00, 00, 08 respectively.

#### Example 1. SROM Data File (SROM.DAT)

```
;
; SROM Data file
;
[
:0 80
:1 00
:2 00
:1A 08
]
```

; SROM data file. This file will be loaded into the SROM

```
[
:0 80
:1 00
:2 00
:3 00
:4 00
:5 80
:6 06
:7 46
:8 00
:9 11
:A 10
:B 00
:C 00
:D 00
:E 80
:F 06
:10 00
:11 00
:12 00
:13 F0
:14 FF
:15 FF
:16 01
:17 FF
:18 FF
:19 FF
:1A 08
:1B 00
:1C C0
```



:1D FF  
:1E 08  
:1F 00  
:20 C0  
:21 FF  
:22 00  
:23 00  
:24 00  
:25 00  
:26 01  
:27 F0  
:28 01  
:29 FF  
:2A FF  
:2B FF  
:2C 08  
:2D 00  
:2E 80  
:2F FF  
:30 00  
:31 00  
:32 00  
:33 90  
:34 00  
:35 02  
:36 00  
:37 00  
:38 00  
:39 00  
:3A 00  
:3B 00  
:3C 00  
:3D 00  
:3E 00  
:3F 00  
:40 00  
:41 00  
:42 00

